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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,127	11/12/2003	L. Terry Boatman	SOF153/143706	7684

23444 7590 03/02/2005

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EXAMINER
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BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.

10/712,127

Applicant(s)

BOATMAN ET AL.

Examiner

Sherman D. Basinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-14 is/are allowed.
- 6) ☒ Claim(s) 1-4, 15-17 and 19 is/are rejected.
- 7) ☒ Claim(s) 5-10, 18, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment*

1. The amendments to the specification filed February 1, 2005 are not compliant with the revised amendment practice effective July 30, 2003. Applicant filed a clean version of the replacement pages and a marked up version of the replacement pages. Only a marked up version should have been filed. A clean version is not required and should not be presented.
2. It is noted that the page numbers of the marked up version of the replacement pages filed February 1, 2005 do not correspond with the page numbers of the specification pages being replaced. As a result, it is not clear which pages are being replaced.
3. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because of the number of changes being made to the specification in the amendment filed February 1, 2005..

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed

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within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

### ***Drawings***

4. The replacement sheets of drawings for figures 15 and 16C filed February 1, 2005 have been approved for entry.

5. The new sheet of drawings with new figure 16D has **not** been approved for entry for the following reason:

The new sheet of drawings filed February 1, 2004 is objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "92" has been used to designate both the outer profile of figure 16B and the flex joint of new figure 16D.

6. Otherwise, the new sheet of drawings with new figure 16D is acceptable.

7. In the first office action a requirement to show winch 48 of claim 11 was made. However, this requirement was in error as winch 48 is shown in figure 3. The requirement is withdrawn.

### ***Specification***

8. The replacement sheets for the specification filed February 1, 2005 have the following errors:

A brief description of figure 4B was not present.

Reference numeral 92 was used to point out both an outer profile and a flex joint.

9. The status of serial number 10/636994 filed August 6, 2003 should be kept current on page 6, line 17 of the specification.

***Claim Objections***

10. Claims 11 and 12 are objected to because of the following informalities: in claim 11, line 16, "said extension member (8)" has no clear antecedent; in claim 12, line 2 "said body (2)" should be –said body (1)- and in claim 11, line 3, "(119)" should be –(11a and 11b)-. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Nion et al in view of Hasebe et al.

O'Nion et al discloses an assembly for mooring a vessel (12) at sea to a body (1) comprising

a yoke (3) selectively disconnectably coupled between said vessel (12) and said body (1) and having first and second ends with a non-disconnectable coupling arrangement 2 between said first end and said body and a disconnectable coupling arrangement between said second end and said vessel 12, said non-disconnectable

coupling arrangement including a pivoted connection 2  
between said first end of said yoke (3) and said body (1) that allows said yoke to rotate  
about a horizontal axis,  
said disconnectable coupling arrangement including a first coupling member (9)  
at said second end of said yoke which is arranged and designed for mating with a  
second  
coupling member (14) carried by said vessel (12), and  
a tension member (16) arranged and designed to extend through said first and  
second coupling members and to be coupled between a winch mechanism (see column  
6, line 18) and a  
connector (inherently present in vessel 12), said mechanism and connector being  
arranged and designed to pull said  
first coupling mechanism (9) into engagement with said second coupling mechanism  
(14).

O'Nion et al does not clearly disclose a selectively operated locking mechanism  
arranged and designed between said  
first and second coupling members to lock said yoke to said vessel, thereby  
mooring said vessel (12) to said body (1) or to unlock said  
yoke (3) from said vessel (12)  
thereby allowing said tension member (16) to be uncoupled from said connector for  
disconnecting said yoke (3) from said vessel (12).

Hasebe et al discloses locking mechanisms 38, 46, 48, 54 and 52.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide first coupling member 9 of O'Nion et al with a locking mechanism similar to 38 of Hasebe et al and second coupling member 14 of O'Nion et al with a locking mechanism similar to 46, 48, 54 and 52 of Hasebe et al to lock the first and second coupling mechanisms and members together. Motivation is to more securely attach the yoke 3 of O'Nion to the vessel 12.

Because claim 2 does not define the specifics of either the LNG process vessel or the LNG carrier vessel, vessel 12 of O'Nion et al is considered to be a LNG carrier vessel and body 1 is considered to be an LNG process vessel.

Member 9 of O'Nion et al is a male cone mounted on a multiple axis joint 6, 7 and member 14 of O'Nion et al is a female receiver 14 mounted on an extension of the vessel and arranged and designed to receive a guide cone.

13. Claims 3, 15-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Nion et al and Hasebe et al as applied to claim 1 above, and further in view of d'Hautefeuille.

O'Nion et al does not disclose a buoyant element located at said second end of said yoke (3) to cause said second end of said yoke (3) not to sink when said first and second coupling members are selectively disconnected and said second end of said yoke (3) rotates about said horizontal axis into the sea.

Note the buoy 9 of d'Hautefeuille.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide a buoy similar to 9 of d'Hautefeuille to the second end of the yoke 3 of O'Nion et al. Motivation to do so is to maintain a stress in the chains mooring the vessel 12 of O'Nion et al. See column 4, lines 25-30 of d'Hautefeuille.

With regard to claims 15-17 and 18, the first vessel is 12 of O'Nion et al, the second vessel is 1 of O'Nion et al, the yoke is 3 of O'Nion et al, the pivotal connection is 2 of O'Nion et al, the buoyant element is similar to buoy 9 of d'Hautefeuille, the first coupling member which is a male guide cone is 9 of O'Nion et al, the second coupling member which is a female receiver is 14 of O'Nion et al, the locking mechanism is similar to 38, 48, 52 and 54 of Hasebe et al, the tension member is 16 of O'Nion et al, the winch mechanism mounted on the second vessel is disclosed in O'Nion column 4, line 18 and the extension is 13 of O'Nion.

#### ***Allowable Subject Matter***

14. Claims 11-14 are allowed. Claim 11 and the claims depending therefrom are allowed over the art of record each taken alone or in combination in view of the following limitations:

providing a messenger rope (17) wound on a winch (48) on said vessel (2),  
connecting said messenger rope (17) to said pull-in rope  
(40) and pulling said



messenger rope (17) and said pull-in rope (40) until said tension member (20) is within said receiver (34), clamping said tension member (20) in said receiver (34), winding said tension member (20) on said windlass (18), thereby pulling said second end of said yoke (10) upward from the sea while pulling said guide cone (32) into said receiver (32) on said extension member (8).

15. Claims 5-10, 18, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

16. Applicant's arguments filed February 1, 2005 have been fully considered but they are not persuasive.

17. Applicant's first argument seems to be based on whether one can consider tanker 1 of O'Nion to be a body and floating column 2 of O'Nion to be a vessel. Considering that applicant claims one of vessels 1 and 2 of his invention as a body, its hard to give merit to this argument. Applicant argues that tanker 1 of O'Nion et al, which is a vessel, cannot be a body, but claims vessel 1 of his invention as a body. If applicant defines his vessel 1 as a body, applicant clearly opens a door which allows one to consider tanker 1 of O'Nion to be a body and column 12 of O'Nion to be a vessel.

18. Further, within the meaning of vessel and body, tanker 1 of O'Nion is a body and column 12 of O'Nion is a vessel.

19. With regard to the arguments concerning the combination of O'Nion et al and Hasebe et al, one looks at link member 26 of Hasebe et al and pin member 9 of O'Nion

et al as being equivalents. They are both pin like. Thus, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to modify pin member 9 of O'Nion et al to have a rod or bar similar to 38 of Hasebe et al.

20. Applicant's arguments concerning d'Hautefeuille are noted, but the language in claim 3 "to cause said second end of said yoke (10) not to sink when said first and second coupling members are selectively disconnected and said second end of said yoke (10) rotates about said horizontal axis into the sea" is an intended use of the buoyant element. So long as the buoyant element of d'Hautefeuille meets the structure defining the buoyant element and "can" perform the intended use, the defining of the intended use of the buoyant element in the claim adds no patentable subject matter. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

21. The rejections stand.

### **Conclusion**

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both Poldervaart et al 868 and 869 are cited to show the FPSO vessel and the LNG vessel and because of each makes reference to O'Nion, which is used to reject claims in the instant application.

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 703-308-1139. The examiner can normally be reached on M-F (6:00-2:30 ET)/5:30-2:00(after 4/11/05).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sherman D. Basinger  
Primary Examiner  
Art Unit 3617  
2/24/05

Thursday, February 24, 2005